Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Name of work : Modified Estimate For Restoration and Improvements of Balance roads of Brundhavana layout, Balaji layout, BHEL 1st phase and 2nd phase layout, Lakshmaiahreddy layout, Naidu layout, Jyothinagara 2nd and 3rd phase, Ramanna garden and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-07)

Modified Schedule - B

Sl No	Description of Item	Unit	Quantity	Rate, Rs	
				In Figures	In Words
1	KSRRB300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.	Cum	6292.48	217.43	Rupees Two Hundred Seventeen And Paise Forty Three Only
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications.	Cum	889.01	5675.99	Rupees Five Thousand Six Hundred Seventy Five And Paise Ninety Nine Only
3	KSRRB M2200-6. Providing TMT Bars Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in postion, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification.	Ton	93.73	80948.07	Rupees Eighty Thousand Nine Hundred Forty Eight And Paise Seven Only
4	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification.	Cum	1810.57	7497.22	Rupees Seven Thousand Four Hundred Ninety Seven And Paise Twenty Two Only
5	Providing and Fixing Pre cast covering Slab 100mm thick made out of CC, jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.	Sqm	4557.16	1941.22	Rupees One Thousand Nine Hundred Forty One And Paise Twenty Two Only

Sl No	Description of Item	Unit	Quantity	Rate, Rs	
				In Figures	In Words
6	Removing and refixing stone slabs of drains and pointing in CM (1:3)	Sqm	447.84	112.41	Rupees One Hundred Twelve And Paise Forty One Only
7	KSRB 5-8.1 : Providing one line dressing to granite stone slab / granite stone masonry as per specifications.	Sqm	447.84	960.33	Rupees Nine Hundred Sixty And Paise Thirty Three Only
8	Providing and fixing RCC precast cover slab of 230mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge.	Sqm	116.10	4530.86	Rupees Four Thousand Five Hundred Thirty And Paise Eighty Six Only
9	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications.	Cum	57.04	6089.85	Rupees Six Thousand Eighty Nine And Paise Eighty Five Only
10	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.	Nos	9506.50	436.80	Rupees Four Hundred Thirty Six And Paise Eighty Only
11	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications.	Sqm	908.58	85.65	Rupees Eighty Five And Paise Sixty Five Only
12	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1km and complete as per specifications.	Cum	9578.66	64.58	Rupees Sixty Four And Paise Fifty Eight Only
13	KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications.	Sqm	23932.39	6.42	Rupees Six And Paise Forty Two Only

Sl No	Description of Item	Unit	Quantity	Rate, Rs	
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14	KSRRB M300-53. Construction of embankment with approved material Gravel /Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density.	Cum	0.00	347.95	Rupees Three Hundred Forty Seven And Paise Ninety Four Only
15	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.	Cum	4400.34	2014.87	Rupees Two Thousand Fourteen And Paise Eighty Seven Only
16	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.	Cum	4773.17	2021.29	Rupees Two Thousand Twenty One And Paise Twenty Nine Only
17	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specification.	Sqm	23554.52	34.26	Rupees Thirty Four And Paise Twenty Six Only
18	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen.	Cum	1177.73	7365.73	Rupees Seven Thousand Three Hundred Sixty Five And Paise Seventy Three Only
19	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications.	Sqm	23554.52	12.85	Rupees Twelve And Paise Eighty Five Only

Sl No	Description of Item	Unit	Quantity	Rate, Rs	
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20	KSRRB M500-19. Providing and laying bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 40 mm) with 5.4% VG-30 Bitumen.	Cum	942.18	8534.82	Rupees Eight Thousand Five Hundred Thirty Four And Paise Eighty Two Only
21	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications.	Sqm	683.54	459.29	Rupees Four Hundred Fifty Nine And Paise Twenty Nine Only
22	KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 – DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.	Nos	0.00	360.79	Rupees Three Hundred Sixty And Paise Seventy Nine Only
	EIRL				
E1	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1km and complete as per specifications.	Cum	1080.64	63.94	Rupees Sixty Three And Paise Ninety Four Only

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				In Figures	In Words
E2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications.	Cum	810.48	5619.79	Rupees Five Thousand Six Hundred Nineteen And Paise Seventy Nine Only
E3	Cement concrete pavement Construction of un-reinforced plain cement concrete pavement,Thickness as per design, over a prepared sub base with 53 grade cement or any other type as per clause 1501.2.2 M30 (Grade) coarse and fine aggregate confirming to IS: 383 Maximum size of coarse aggregate not exceeding 25mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weight batcher as per approved mix design laid in approved fixed of 125 micron thick polythene film, wedges steel plates including levelling the form work as per drawing) spreading the concrete with shovels rackers compacted using needle screed and plate vibrator and finished in a continuous operation including provision of construction joints primer joint sealant curring of concrete slabs for 14 days and wateri finishing to lines and grade as per drawing and technical specification clause 1501 with all lead lifts loading & unloading charges cost and conveyance of all materials (P.No-176,I No-22.61)	Cum	810.48	5325.64	Rupees Five Thousand Three Hundred Twenty Five And Paise Sixty Four Only

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